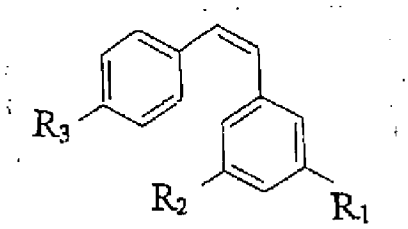
## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-23. (Cancelled)

24. (Previously Presented) A method for synthesizing the compound **14g** having the following structure and wherein $R_1$ = -OH and $R_2$=$R_3$= -$OCH_3$:




comprising the following steps:

(a) protecting 3,5-dihydroxybenzaldehyde by reacting it in dimethylformamide with DIEA and silyl chloride;

(b) separating the products of step (a) to obtain 3-(tert-butyldimethylsilyoxy)-5-hydroxybenzaldehyde;

(c) adding to the 3-(tert-butyldimethylsilyoxy)-5-hydroxybenzaldehyde obtained in step (b) molecular sieves, proton sponge and trimethyloxonium tetrafluoroborate, then stirring, then filtering, then rinsing sieves with ~~solvent~~ ethyl acetate, then removing the ~~solvent~~ ethyl acetate containing solvent from the filtrate to yield an oil;

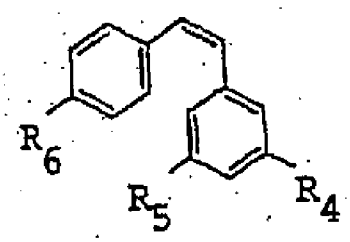
(d) purifying the oil produced in step (c), to yield 3-(tert-butyldimethylsilyoxy)-5- methoxybenzaldehyde;

(e) reacting the 3-(tert-butyldimethylsilyoxy)-5-methoxybenzaldehyde produced in step (d) with 4-(tert-butyldiphenylsilyloxy)-benzyltriphenyl

phosphonium bromide to produce (Z)- and (E)-3-(tert-butyldimethylsilyoxy)-5,4'-dimethoxy-stilbene; and

(f) deprotecting, and then separating, the product of step (e), to obtain compound **14g.**

25. (Previously Presented) A method for synthesizing the compound **14c** having the following structure wherein $R_4 = R_5 = -OCH_3$ and $R_6 = -OH$:




comprising the following steps:

(a) protecting 4-hydroxybenzaldehyde by reaction with Hunig's base to obtain a solution of 4-(tert)-butyldimethylsilyloxy-benzaldehyde;

(b) adding tert-butyldimethylsilylchoride to the solution formed in step (a);

(c) pouring the reaction mixture of step (b) into water, extracting with solvent, and removing solvent in vacuo to recover 4-(tert)-butyldimethylsilyloxy-benzaldehyde;

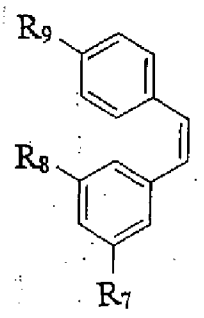
(d) reacting the 4-(tert)-butyldimethylsilyloxy-benzaldehyde obtained in step (c) with 3,5-dimethoxybenzyltriphenyl phosphonium bromide and n-butyl lithium in tetrahydrofuran to form (Z)- and (E)-4'-(tert-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene;

(e) separating the (Z) and (E) isomers of the 4'-(tert-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene formed in step (d) to obtain (Z)-4'-(tert-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene;

(f) reacting the (Z)-4'-(tert-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene in anhydrous tetrahydrofuran with tetrabutylammonium fluoride; and

(g) separating the products of step (f) to obtain compound **14c.**

26. (Previously Presented) A method for synthesizing the compound **14k** having the following structure wherein $R_7 = R_8 = -OH$ and $R_9 = -OCH_3$:




comprising the following steps:

(a) reacting 4-methoxybenzyltriphenylphosphonium bromide and 3,5-di(tert-butyldimethylsilyloxy)-benzaldehyde to obtain (Z)- and (E)-3,5-di(tert-butyldimethylsilyloxy)-4'-methoxy-stilbene);

(b) deprotecting the (Z)- and (E)-3,5-di(tert-butyldimethylsilyloxy)-4'-methoxy-stilbene obtained in step (a); and

(c) separating the product of step (b) to obtain compound **14k.**

27. (Previously Presented) A method for synthesizing compound **14m,** the resveratrol derivative of claim 4 wherein $R_{10}=R_{11}= -OCH_3$ and $R_{12} = - O(PO)(OBn)_2$,

comprising the following steps:

(a) protecting 4-hydroxybenzaldehyde with Hunig's base to obtain a solution of 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde;

(b) adding *tert*-butyldimethylsilylchoride to the solution formed in step (a);

(c) pouring the solution formed in step (b) into water, extracting with solvent, and removing solvent *in vacuo* to recover 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde;

(d) reacting the 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde obtained in step (c) with phosphonium bromide and *n*-butyl lithium in tetrahydrofuran to form (Z)- and (E)-4'-(*tert*-butyldimethylsilyloxy)-3,5 -dimethoxy-stilbene;

(e) separating the (Z) and (E) isomers of the 4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene to obtain (Z)-4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene;

(f) reacting the (Z)-4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene obtained in step (e) with tetrabutylammonium fluoride and stirring, and separating the product of step (f) to obtain (Z)-3,5-dimethoxy-4'-hydroxy-stilbene;

(g) forming, then cooling, a mixture of (Z)-3,5-dimethoxy-4'-hydroxy-stilbene obtained from step (f) and *N,N*-dimethylaminopyridine in anhydrous acetonitrile;

(h) adding carbon tetrachloride and DIEA and to the cooled mixture of step (g), and stirring;

(i) pouring the product of step (h) into monobasic potassium phosphate, extracting with solvent and then removing solvent *in vacuo* to yield an organic phase; and

(j) subjecting the organic phase from step (i) to separation to obtain compound **14m.**

28. (Currently Amended) A method for synthesizing compound **14n,** the resveratrol derivative of claim 4 wherein $R_{10}$ = $R_{11}$ = $-OCH_3$ and $R_{12}$ = $-O(PO)(ONa)_2$, comprising the following steps:

(a) protecting 4-hydroxybenzaldehyde with Hunig's base to obtain a solution of 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde;

(b) adding *tert*-butyldimethylsilylchoride to the solution formed in step (a);

(c) pouring the solution formed in step (b) into water, extracting with solvent, and removing solvent *in vacuo* to recover 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde;

(d) reacting the 4-(*tert*)-butyldimethylsilyloxy-benzaldehyde obtained in step (c) with phosphonium bromide and *n*-butyl lithium in tetrahydrofuran to form (Z)- and (E)-4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene;

(e) separating the (Z) and (E) isomers of the 4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene to obtain (Z)-4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene;

(f) reacting the (Z)-4'-(*tert*-butyldimethylsilyloxy)-3,5-dimethoxy-stilbene obtained in step (e) with tetrabutylammonium fluoride and stirring, and separating the product of step (f) to obtain (Z)-3,5-dimethoxy-4'-hydroxy-stilbene;

(g) forming, then cooling, a mixture of (Z)-3,5-dimethoxy-4'-hydroxy-stilbene obtained from step (f) and *N,N*-dimethylaminopyridine in anhydrous acetonitrile;

(h) adding carbon tetrachloride and DIEA and to the cooled mixture of step (g), and stirring;

(i) pouring the product of step (h) into monobasic potassium phosphate, extracting with solvent and then removing solvent *in vacuo* to yield an organic phase;

(j) subjecting the organic phase from step (i) to separation to obtain (Z)-3,5-dimethoxy-4-[*O*-bis(benzyl)phosphoryl]-stilbene;

(k) adding bromotrimethylsilane to a solution of the (Z)-3,5-dimethoxy-4-[*O*-bis(benzyl)phosphoryl]-stilbene obtained in step (j) in anhydrous dichloromethane, and stirring;

(l) adding water to the stirred solution obtained in step (k), washing with solvent to form an aqueous phase, then freeze drying the aqueous phase to form a solid;

(m) forming a solution of the solid formed in step (l) and a solvent, adding sodium methoxide to the solution, stirring, removing the solvent; and

(n) recovering a solid remaining after step (m) to obtain compound **14n.**